CLAIMS

1. An apparatus for determining when a patient is susceptible to defibrillation, the system comprising a plurality of electrodes for obtaining an electrocardiographic (ECG) signal from a patient, and data processing means for (a) determining a region of the ECG signal where such signal passes from a first threshold to a second threshold at least equal in magnitude to that of the first threshold and of opposite polarity thereto while the gradient of such signal remains within certain limits, (b) detecting the next following ECG signal peak, and (c) providing an output signal upon such detection.

2. An apparatus as claimed in claim 1, wherein the first threshold is a negative threshold and the second threshold is a positive threshold.

3. An apparatus as claimed in claim 1, wherein the first threshold is a positive threshold and the second threshold is a negative threshold.

4. A defibrillator including an apparatus as claimed in claim 1, 2 or 3 wherein the occurrence of the output signal is used to trigger the application of a defibrillation voltage across defibrillation electrodes.

5. A defibrillator as claimed in claim 4, wherein the electrodes providing the ECG signal are also the defibrillation electrodes.

6. A defibrillator as claimed in claim 4 or 5, wherein the defibrillation voltage is an n-phasic truncated exponential voltage where n is greater than one.

7. A defibrillator as claimed in claim 4, 5 or 6, wherein the defibrillation voltage is a biphasic truncated exponential voltage.